

We claim:

1. A substantially purified nucleic acid molecule that encodes an algal protein or fragment thereof comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 5674.

2. The substantially purified nucleic acid molecule according to claim 1, wherein said algal protein or fragment thereof is a *Cyanidium caldarium* protein or fragment thereof.

3. A substantially purified *Cyanidium caldarium* protein homologue or fragment thereof encoded by a nucleic acid molecule that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 5674.

4. A transformed cell having a nucleic acid molecule which comprises:

(A) an exogenous promoter region which functions in said cell to cause the production of a mRNA molecule; which is linked to

(B) a structural nucleic acid molecule, wherein said structural nucleic acid molecule comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 5674; which is linked to

(C) a 3' non-translated sequence that functions in said cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.

5. The transformed cell according to claim 4, wherein said cell is selected from the group consisting of an algal cell, a plant cell, a mammalian cell, a fungal cell and an insect cell.

6. The transformed cell according to claim 4, wherein said cell is an algal cell

7. The transformed cell according to claim 6, wherein said cell is a *Cyanidium caldarium* cell.